

3M™ High Air Flow Electrostatic Filters

Helps reduce the amount of smoke, dust, dirt and debris that enters electronic enclosures

3M™ High Air Flow Electrostatic Filters (HAF-E) have been specially designed to effectively help reduce the amount of certain air-borne contaminants such as smoke, dust, dirt, debris and carpet fibers from entering the air intakes on devices such as slot machines, vending machines, arcade games, ATMs, kiosks, and computers.

Peak Filter Performance

3M HAF-E filters utilize novel microstructured features shaped in a hollow triangle pattern to increase filter surface area to allow high air flow rates while minimizing pressure drop across the filter. Additionally, filter effectiveness is maximized by utilizing 3M's proprietary electrostatic manufacturing process which provides an electrostatic attraction from the filter surfaces to airborne particles to help attract and capture fine particulates and smoke while providing a low pressure drop.



Equipment Uptime

With a 3M high efficiency filter protecting the air intake ducts from certain air-borne contaminants, the need to perform daily, weekly, and/or monthly cleaning of a device interior may be reduced. Filter change-out can be performed in less than 30 seconds with no special tools and typically does not require taking the equipment out-of-service resulting in maximum uptime of the OEM device.



Recommended Applications

- Slot Machines
- Arcade Games
- ATMs
- Critical Electronic Components
- Kiosks
- Computers
- Vending Machines

Constructed to Perform

The hydrophobic (non-water absorbing) polypropylene filter media in an all High Impact Polystyrene (HIPS) filter housing construction provides superior durability for recommended applications. The filter housing material has a textured matte black finish that complements the industrial design of the device it is mated with to maintain a finished professional look.

Feature	Benefit
Electrostatic Filter Media	<ul style="list-style-type: none">• Helps attract and capture fine particulates and smoke and provides a low pressure drop. The resulting clean, high air flow helps attract and capture fine particulates and smoke while providing a low pressure drop.
Novel Microstructured Features	<ul style="list-style-type: none">• High-air-flow design provides particulate protection of fine components while helping to minimize any component temperature increase (the filter protects components from debris building while contributing $\leq 5^{\circ}\text{F}$ increase under normal conditions)• High filtration surface area can help to extend the filter's useful lifetime• Rigid filter construction provides a clean, effective filtration solution, and minimizes particle dislodgment during filter changeout
Ease-of-Service	<ul style="list-style-type: none">• Specifically designed for rapid (less than 30 seconds) filter changeout with no tools required• Maximizes system uptime



3M™ High Air Flow Electrostatic Filter Specifications

Specifications

Filter Media Material	Hydrophobic Polypropylene
Filter Housing Material	High Impact Polystyrene (HIPS)
Filtration Surface Area	0.2 m ² (2.15 ft ²)
Outside Dimensions (W x H x D)	271 x 130 x 20 mm 10.66 x 5.13 x 0.77 inches
Max Operating Temperature	158°F (70°C)
Minimum Efficiency Rating Value (MERV)	MERV 6 @ 75 cfm
Recommended Changeout Time	3 months*
RoHS Directive Compliant	Yes
Independent Laboratory Testing	Tested by an independent laboratory per applicable sections of ASHRAE 52.2

The table below indicates the approximate size of some common contaminants and particles for reference only. The size of particles are often described in microns, a metric unit of measure where one micron is one-millionth of a meter.

Contaminant Type	Typical Particle Size Range
Tobacco Smoke	0.01 - 4 microns
Fiber Lint	5 microns
Carpet Textile Fibers	10 - 1000 microns
Human Hair	40 - 300 microns
Dust Mites	100 - 300 microns

Note: Particle sizes may vary and dimensions listed above are approximate and for reference only.

Ordering Information

Item	Ordering Number
3600B Filter and Bracket Assembly	70020266048
3600 Filter Assembly	70020266063



Filter and bracket assembly



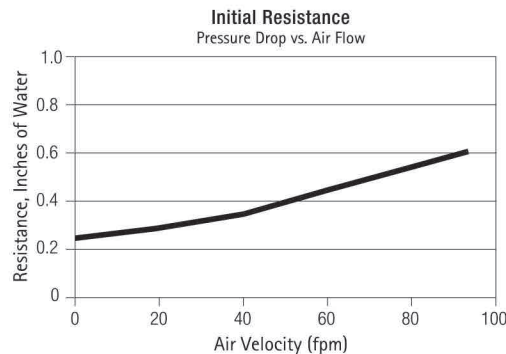
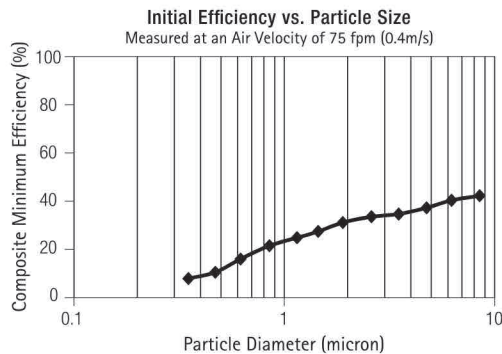
Bracket adhesive mounting strips



Filter and bracket assembly latch



Filter assembly



* We recommend you change the filter every three months. However, the life of a filter can depend on the individual conditions in environment. You may need to change your filter more often if the facility has unusually dirty duct work, construction work in progress, smokers, furniture or drywall sanding in progress, or continuously running fans.

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